

TWO NEW LAND SHELLS FROM KERN COUNTY, CALIFORNIA

By G. WILLETT

A few months ago Kenneth E. Stager, ornithologist, brought in a shell of a snail that he had found in the Piute Mountains, Kern County, California. Although the specimen was much bleached, it proved so interesting that it appeared well worth while to investigate the locality further. Consequently, on May 29, 1938, the writer and his wife accompanied Mr. Stager to the locality where the shell had been found, and a careful search of several hours by the three of us resulted in securing sixteen specimens, only one of which was living, however. These were all found under rocks in slides on a steep mountain slope, on the southwest side of Erskine Creek, about 1,000 feet above the creek bottom, at an altitude of approximately 5,500 feet.

A study of the above specimens appears to indicate that this snail is an undescribed species of *Helminthoglypta*, which may be known as

HELMINTHOGLYPTA STAGERI sp. nov. (Pl. 11)

Description: Shell large for the genus, depressed, conspicuously umbilicate, about one-third of the umbilicus covered by the reflection of the inner lip. Color light brown, paler on the base, with a dark chestnut-brown band, from one to two millimeters in width, encircling the last whorl at the shoulder; above and below the brown band are rather indefinitely defined light bands, the lower one being about as wide as the dark band and the upper one somewhat narrower. Aperture oval, very oblique. Spire depressed; whorls convex, the last whorl descending in

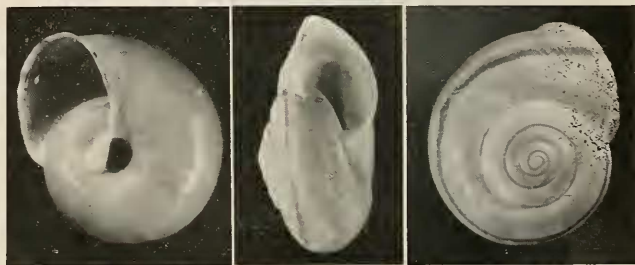


PLATE 11

Helminthoglypta stageri, Willett.
Photograph of type, natural size.

front. Nuclear whorls finely but thickly papillated, radiately wrinkled; papillae becoming larger and more widely spaced on later whorls, and hardly apparent on the last whorl excepting immediately behind the aperture and in the umbilicus. Last whorl with no apparent spiral sculpture.

Type No. 1055, Los Angeles Museum, collected by G. Willett at about 5,500 feet altitude on the southwest side of Erskine Creek, Piute Mountains, Kern County, California, May 29, 1938. Paratypes in California Academy of Sciences, Academy of Natural Sciences of Philadelphia, and the collection of the writer. The type has six whorls and measures in millimeters: Greater diameter, 31.5; lesser diameter, 24.8; height from umbilicus to apex, 12.3.

Remarks: This species, when inspected without magnification, is surprisingly similar to typical *H. petricola* Berry, from Mill Creek, San Bernardino Mountains. However, considering the distance between the known ranges of the two shells, that several mountain ranges and valleys lie between, and that numerous other species of *Helminthoglypta* occupy the intervening territory, the genetic relationship of the two can hardly be very close. *Stageri* is of slightly more depressed form than *petricola* and appears to lack entirely the incised spiral lines nearly always present in that species.

Incidentally, Californian students of this group of mollusks are unable to understand Dr. Paul Bartsch's contention (Proc. U. S. Nat. Mus., 51, 1916, pp. 612-613) that *H. petricola* is assignable to typical *H. traski* (Newc.). Although there has been some doubt expressed as to whether the two are more than sub-specifically distinct, it is generally conceded that they are very different.

On July 2, 1938, the writer and his wife returned to the Piute Mountains, on this occasion going to the top of the main ridge. Camp was established among pine and fir timber along the Piute Mountain road ten and one-half miles southeast of its intersection with the Walker Basin-Bodfish road. At this point there is a small spring from which water is piped to a metal trough just below the road. On the afternoon of July 2 and the following day, by searching under and along fir logs, we succeeded in obtaining twenty living snails, nearly all immature. These were usually attached to the under side of pieces of bark. An examination of these specimens reveals that they represent an undescribed form, which may be called

HELMINTHOGLYPTA CUYAMACENSIS PIUTENSIS subsp. nov. (Pl. 12)

Description: Shell openly umbilicated, inner lip only slightly reflected over umbilicus. Apex much depressed. Aperture round-oval, oblique; outer lip descending somewhat at the suture. Color

about mummy brown, of Ridgway, lighter on the base; at the shoulder is a darker brown band slightly more than one millimeter in width, bordered above and below by narrower, obscurely defined, lighter bands. Entire upper surface finely papillated, the papillae becoming finer and less distinct on the lower part of the last whorl, where they are most pronounced inside and behind the aperture, and in the umbilicus. No spiral sculpture apparent.

Type No. 1036, Los Angeles Museum, collected by G. Willett on Piute Mountains, Kern County, California, altitude about 7,000 feet, July 3, 1938. Paratypes in California Academy of Sciences, Academy of Natural Sciences of Philadelphia, and collection of the writer. The type has five and one-eighth whorls and measures in millimeters; Greater diameter, 24; lesser diameter, 19.8; height from umbilicus to apex, 8.2.

Remarks: This shell is much flatter above than any other known race of the species. It appears to be larger and less evenly papillated than *H. c. cuyamacensis* and *H. c. venturensis*, and has a much more open umbilicus than *H. c. atus*.



PLATE 12

Helminthoglypta cuyamacensis piutensis Willett.
Photograph of type, natural size.